



RUSH UNIVERSITY
MEDICAL CENTER

PARKINSON NEWSLETTER

Impulsive Behaviors in Parkinson's Disease

Brandon R. Barton, MD, MS



It is becoming increasingly clear that patients with Parkinson's disease not only suffer from motor symptoms

such as tremor and slowness, but may also develop many non-motor symptoms such as mood, behavior, and cognitive changes. Over the last several years, doctors have newly recognized a set of behaviors in Parkinson's disease patients who are being treated with dopamine-based medications. These behaviors have in common a tendency for the patient to act impulsively when engaging in rewarding activities. These behavioral disorders, officially called "Impulse Control Disorders," may cause a subtle or dramatic change in the patient's behavior, sometimes with devastating consequences.

The most common types of impulsive behaviors noted in studies include excessive time, effort, and money spent in the

pursuit of gambling, sexual activities, eating, and shopping. Patients may engage in these activities to an abnormal degree, sometimes without the knowledge of their family and friends. Patients are unable to resist the positive and rewarding feelings they can get from engaging in these activities, even at the expense of negative consequences. If left unchecked, the consequences of these behaviors can be devastating, including bankruptcy, loss of financial savings, excessive debt, legal troubles, imprisonment, weight gain, marital stress, divorce, depression, and decreased quality of life.

Other related impulsive behaviors have been noted, including excessive involvement in the following: hobbies, purposeless wandering or driving, internet use, substance abuse, singing, rearranging, dismantling or sorting objects, or doodling. In rarer cases, patients on high doses of levodopa develop a drug addiction to their Parkinson's medications, similar to addiction from illicit drug use.

The cause of these behaviors is complex and still not fully understood. However, we know that there is a significant contri-

bution by three major factors:

1. Medication Use: While Parkinson's disease medications are necessary and clearly effective in treating the motor symptoms of the disorder, they may have several side effects. Impulse control disorders occur most commonly in patients treated with dopamine agonists, which include pramipexole (Mirapex) and ropinirole (Requip). Up to 17% (about 1 of every 6) of Parkinson's patients on these drugs may develop these behaviors at any point while being treated with dopamine agonists. However, the behaviors may also occur less frequently in patients on levodopa (Sinemet) or other Parkinson's medications.

2. Individual Factors: Some patients, by nature of their personal characteristics or disease features, may be at higher risk for developing this disorder. There may be a genetic risk, but this is still under investigation.

3. Parkinson's Disease-Related Factors: Imbalances in the reward and motivation centers of the brain due to the underlying disease.

(Continued on Page 2)

(Continued from Page 1)

Treatment of these behaviors depends on the individual and should be discussed with your doctor. Most of the time a change in medication doses will relieve the problem, but in some cases a more comprehensive plan needs to be adopted. Prevention is a main goal: families, caregivers, and patients should work together in monitoring for these behaviors and bring them to the attention of the treating physician as soon as they appear. ☺

WELCOME AND HELLO TO OUR FELLOWS!!



Dr. Sheila Rane is thrilled to join the Movement Disorder group for her fellowship training. She attended Indiana University for her undergraduate studies. Dr. Rane completed a Bachelor of Science in Biology and graduated Phi Beta Kappa with high distinction. She then went on to Indiana University School of Medicine where she received her MD. Dr. Rane completed her neurology residency at Rush University Medical Center, functioning as chief resident during her final year. She has a long-standing interest in movement disorders, particularly dystonia. During her residency training she completed research work in cervical dystonia and co-authored several chapters in neurologic textbooks. She looks forward to this next step in her career.



Dr. Houman Homayoun received his medical degree from the University of Tehran. After his internship, he pursued basic research in neuropharmacology and neurophysiology for several years. During this period, he became a postdoctoral fellow in neuroscience at Yale University and then at the University of Pittsburgh. His research interests focused on mechanisms through which populations of brain cells would participate in higher cognitive functions and how their activity would be affected in experimental models of disease, and by neuropharmacological agents. This work was mainly focused on the prefrontal cortex, an area of brain that has a key role in higher cognition and executive functions, as well as the basal ganglia, which plays a key role in many movement disorders. He received a two-year research grant award from Tourette Research Association. This opportunity led to further interest in movement disorders and he decided to pursue his clinical career in neurology. He completed his neurology residency at the University of Pittsburgh in June 2011 and is now at Rush University for a movement disorders fellowship.

AND A FOND FAREWELL

To Dr. Sachin Kapur. Dr. Kapur completed his Movement Disorder Fellowship and has taken a position with Neurologic Associates located in Palos Heights, Illinois. Dr. Kapur was a pleasure to work with and his co-workers and his patients will miss him.

Partnerships in Research

Your donations are needed to support our research. Rush University Medical Center is a not-for-profit organization and your gift is fully tax deductible. You may designate your gift to the area of greatest need within our group or direct it to an area of interest to you (patient care, research, or community outreach efforts). For further information, please contact Bernadette O'Shea at 312-942-8710 or email bernadette_o'shea@rush.edu

The Rush Parkinson's Disease Symposium 2011

Friday, September 9, 2011

12:00 pm to 5:00 pm

(Registration/Sign-in begins at 11:00 am)

Hyatt Regency O'Hare Hotel

Announcing the 11th Patient/CarePartner Symposium entitled: "The Rush Parkinson's Disease Symposium 2011" which will be held on Friday, September 9, 2011 from noon to 5:00 p.m. at the Hyatt Regency O'Hare Hotel, 9300 W. Bryn Mawr Road, Rosemont, IL. The Patient/CarePartner Conference is sponsored by the Movement Disorder Section of the Department of Neurological Sciences at Rush University Medical Center in Chicago and the Parkinson's Disease Foundation (PDF). The moderators of the conference are Dr. Katie Kompoliti, Dr. Deborah Hall, and nurse Luci Blasucci. The conference is focused on the education of Parkinson's disease patients. The overall goal is to provide an understanding of the roles of various drugs and surgical techniques in the approach to specific problems experienced by the Parkinson's disease patient. Refer to page 4 for a preliminary agenda and topics to be presented.

The last conference of this type was held on May 21, 2010 and had full attendance. Admission to the conference is free, but seating is limited. Advance registration is required. In order to reserve your seat, please complete the registration form below and send it to us.

On the day of the conference, **sign-in will begin at 11:00 a.m.** The conference will be held in the Conference Center of the Hyatt Regency O'Hare Hotel (see map and directions on page 6). The hotel has an adjoining parking garage with a discounted self parking charge of \$10.00. Valet parking is also available at the prevailing rate.

CANCELLATIONS:

After reserving your seat, if for any reason you find that you cannot attend the conference, please contact our office at 312-942-8002 so that we may open your seat(s) to other Patients/CarePartners.

The conference is partly supported by the following: The Parkinson's Disease Foundation. Additional education grant support is being sought from: Metronic, Novartis, and Teva.

(complete form, detach and return)

REGISTRATION FORM

(Please print or type)

I would like to attend the Parkinson's Disease Patient/CarePartner Conference

Name (1): _____

Name (2): _____

Address: _____

City: _____ State _____ Zip _____

Phone Number (_____) _____

Number of persons attending: _____

Email Address: _____

Please mail your completed registration form to:

Ms. Teresa Chmura
Rush University Medical Center
Department of Neurological Sciences
1725 W. Harrison Street, Suite 755
Chicago, IL 60612

Fax: (312) 563-2684 / Phone: (312) 942-8002

Rush Parkinson's Disease & Movement Disorders**Symposium 2011****Hyatt Regency O'Hare - Rosemont, IL****September 9, 2011***Preliminary Agenda***PATIENT/CAREPARTNER CONFERENCE**

11:00-11:50	Registration/Sign-In	
11:50-12:00	Welcome	Deborah A. Hall, MD, PhD & Lucia M. Blasucci, RN, CCRC
12:00-12:30	Current Medical Treatment Options	Katie Kompoliti, MD
12:30-1:00	Upcoming Treatments	Kathleen M. Shannon, MD
1:00-1:30	Neuropsychiatric Complications	Jennifer G. Goldman, MD, MS
1:30-2:00	Non-Motor Problem Behavior & Dysautonomia	Brandon Barton, MD
2:00-2:30	Break (30 Minutes)	
2:30-3:00	Patient/Physician Interactions	Mrs. Jedlinski and Cynthia Comella, MD
3:00-3:30	PD Surgery	Leo Verhagen, MD, PhD
3:30-4:00	Nursing Issues	Luci Blasucci, RN
4:00-4:30	Brain Donation Autopsy Findings	Jeffrey Kordower PhD & Jennifer Goldman MD, MS
4:30-5:00	Questions & Answers	Drs. Barton, Hall, Goldman, Verhagen, & Kordower, Nurse Blasucci
5:00	Adjourn	

Patient/CarePartner Conference is not a CME-accredited program

Coenzyme Q10 Study Stopped Because of Lack of Evidence that it Delays Progression of Early Parkinson's Disease

On May 27, the National Institute of Neurological Diseases and Stroke (NINDS) announced the halt of a large clinical trial conducted by the Parkinson Study Group (PSG) on the potential beneficial effects of the dietary supplement coenzyme Q10 (CoQ10) on reducing the progression of early Parkinson's disease (PD). Their reason: a mid-study analysis suggested that there is no improvement in the CoQ10-treated individuals in comparison to those receiving placebo (empty tablet) treatment and that continuing the program would have a very low likelihood of demonstrating any benefit from coenzyme Q10 usage in delaying the progression of early PD.

For this reason, the Data Safety Monitoring Board of the program recommended stopping the study. Individuals currently enrolled in the program have been notified and the study sites are in the process of meeting with all participants.

For the PD community, both scientists and people with Parkinson's and their care partners, this outcome is disappointing. In an earlier, far smaller study, there was preliminary evidence that taking CoQ10 at 1200 mg/daily appeared to slow disease progression. For this reason, the current study focused on the effects of CoQ10 at 1200 and 2400 mg daily. The study involved the participation of 600 individuals with early Parkinson's in 67 North American study centers. To date, there were no reported safety concerns related to CoQ10 at dosages of 1200 mg/day

and 2400 mg/day for up to 16 months of treatment.

Christopher G. Goetz, M.D., Chair of the PDF Medical Policy Subcommittee comments:

"While a final judgment on the efficacy of CoQ10 must await full analysis of the data and peer review, PDF trusts the conclusion of the study sponsors that there is no evidence that CoQ10 reduces the progression of Parkinson's disease. The action taken on May 27 shows the vigilance of NINDS and PSG in assuring that individuals in the study are kept well informed throughout the duration of a study, and are advised immediately in the event that an investigative treatment is found to have little likelihood of success."

"People with Parkinson's disease who are receiving CoQ10, and who feel they have been substantially helped while taking this over-the-counter product, may wish to discuss with their physician whether the group results should lead them to stop CoQ10 treatment or to continue treatment because of their individual response."

"Fortunately, there are several new and ongoing programs that are studying the same question of whether early treatment of Parkinson's disease can positively delay clinical decline. These agents work differently from CoQ10 and they offer individuals in the current CoQ10 program - as well as other people with early PD - key opportunities for potential enrollment to continue our quest to delay the clinical decline of Parkinson's disease."

Additional information available the Parkinson's Disease Foundation website: www.pdf.org.

E-Mailing the Movement Disorder Group

The Movement Disorder Group maintains an e-mail address for the convenience of our patients and for people who seek information regarding our clinic and/or research. The e-mail address is:

Movement_Disorder@Rush.Edu

Most messages received by e-mail will receive a response within two days. If you have a question that needs a quicker response, please call our office at (312) 563-2900.

Directions to The Rush Parkinson's Disease Symposium, September 9, 2011

From O'Hare International Airport:

Take I-190 East to River Road South Exit. Hotel is on the left side.

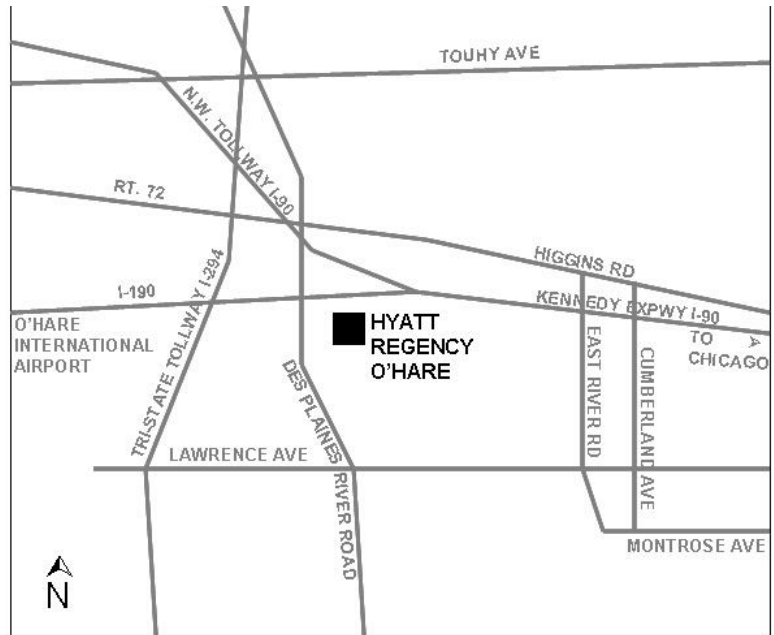
From Midway Airport:

Take Cicero Avenue North to I-55 South to I-294 North. Follow directions to O'Hare. Exit River Road South. Hotel is on the left.

Venue: Hyatt Regency O'Hare Hotel

Address: 9300 W. Bryn Mawr Road
Rosemont, IL 60018

Phone: 847-696-1234



Monthly Educational and Support Program

WHEN: Second Saturday of each month, 10:00 am to 12:00 noon

LOCATION: Oak Park Hospital (Back of Cafeteria)

<i>September 10, 2011</i>	<i>Bryan Bernard</i>	<i>December 10, 2011</i>	<i>Daniel Corcos</i>
<i>October 8, 2011</i>	<i>Jennifer Goldman</i>	<i>January 14, 2012</i>	<i>Christina Vaughan</i>
<i>November 12, 2011</i>	<i>Aleksandar Videnovic</i>		

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**Your invitation to the
PD Patient/Caregiver
Symposium is included in
this issue (see Page 3)**